

Gopikrishna V

S6 CSA

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Program

```
import requests
```

```
from collections import Counter
```

```
class req_functions():
```

```
    def averageWordLength(text):
```

```
        words=text.split()
```

```
        Tlen=sum(len(word) for word in words)
```

```
        if len(words)==0:
```

```
            return 0
```

```
        else:
```

```
            return Tlen/len(words)
```

```
    def modeT3(text):
```

```
        words=text.split()
```

```
        count=Counter(words)
```

```
        return count.most_common(3)
```

```
    def synonymAPI(word):
```

```
        url=f"https://api.datamuse.com/words?rel_syn={word}"
```

```
        response=requests.get(url)
```

```
        if response.status_code==200:
```

```
            data=response.json()
```

```
            return [item['word'] for item in data]
```

```
        else:
```

```
            print("Failed Retrieval\n")
```

```
            return []
```

```
    def wordReplaceSuggest(textR,overusedW):
```

```
        suggestions={}
```

```
        for wordx in overusedW:
```

```
            synonyms=req_functions.synonymAPI(wordx)
```

```
            if synonyms:
```

```
                suggestions[wordx]=synonyms[0]
```

```

        else:
            suggestions[wordx]="NO REPLACEMENTS"
        return suggestions

print('\nAVERAGE WORD LENGTH FINDER\n')
text=input("String >> ")
avgLen=req_functions.averageWordLength(text)
print("Average Word Length = ", avgLen)

print('\nTOP THREE FREQUENT WORDS FINDER\n')
text=input("String >> ")
for word,count in req_functions.modeT3(text):
    print(f"{word} :: {count}")

print('\nREPLACEMENT SUGGESTOR\n')
textS=input("String >> ")
wordS=input("Overused Words List >> ")
overusedList=wordS.split()
replaceW=req_functions.wordReplaceSuggest(textS,overusedList)
for wordR,replaceW in replaceW.items():
    print(f"{wordR} >>> {replaceW}")

```

Output

```
AVERAGE WORD LENGTH FINDER
```

```
String >> Lorem ipsum is a placeholder text commonly used to demonstrate the
visual form of a document or a typeface without relying on meaningful content.
```

```
Average Word Length = 5.083333333333333
```

```
TOP THREE FREQUENT WORDS FINDER
```

```
String >> i was i was i did
```

```
i :: 3
```

```
was :: 2
```

```
did :: 1
```

```
REPLACEMENT SUGGESTOR
```

```
String >> the house is good. the house is nice.
```

```
Overused Words List >> house
```

```
house >>> home
```

```
PS C:\Users\GOPIKRISHNA V> █
```